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In re Application of: )  
Chris Yoochang Chung et al. )  
Application No. 10/053,431 )  
Filed: January 17, 2002 )  
For: PROGRAMMABLE 3D GRAPHICS )  
PIPELINE FOR MULTIMEDIA )  
APPLICATIONS )

**DECISION ON PETITION TO  
WITHDRAW RESTRICTION  
REQUIREMENT UNDER 37 CFR  
§1.144**

This is a decision on the petition filed December 09, 2004 (Certificate of Mailing dated December 06, 2004) under 37 C.F.R. §1.144 to withdraw an outstanding restriction requirement.

The petition is **DENIED**.

On June 07, 2004 the examiner required restriction between Invention I, claims 1, 3-16, drawn to “programmable graphics pipeline”, classified in class 345, subclass 506, Invention II, claims 17-22 drawn to “processing graphics data and media data” classified in class 345, subclass 546, Invention III, claims 23-29 drawn to “processing variable length data” classified in class 345, subclass 522, Invention IV, claim 30 drawn to “caching texture data and media data” classified in class 345, subclass 552.

The rationale used by the examiner in support of the restriction requirement included explanation that the 4 groups of claims are related as subcombinations which are distinct from each other if they can be shown to be separately useable. The examiner stated that the second group of claims has separate utility as multiplex communication.

On June 10, 2004 Applicant elected the claims of Invention I, and further elected the claims of the first group of claims, while traversing the requirement. Applicant argued that the four groups are not separately useable due to incorrect classification.

On September 1, 2004, the examiner maintained the restriction requirement making it Final while rejecting elected claims 1, 3-16 in the Final Office action.

On December 06, 2004, petitioner filed the instant petition.

### **REGULATIONS AND PRACTICE**

#### **37 C.F.R. § 1.144 states:**

After a final requirement for restriction, the applicant, in addition to making any reply due on the remainder of the action, may petition the Commissioner to review the requirement ... A petition will not be considered if reconsideration of the requirement was not requested (see § 1.181).

#### **37 C.F.R. § 1.181 states:**

- (a) Petition may be taken to the Commissioner:
  - (1) From any action or requirement of any examiner in the ex parte prosecution of an application, or in ex parte or inter partes prosecution of a reexamination proceeding which is not subject to appeal to the Board of Patent Appeals and Interferences or to the court;
  - (2) In cases in which a statute or the rules specify that the matter is to be determined directly by or reviewed by the Commissioner; and
  - (3) To invoke the supervisory authority of the Commissioner in appropriate circumstances. For petitions in interferences, see § 1.644.
- (b) Any such petition must contain a statement of the facts involved and the point or points to be reviewed and the action requested. Briefs or memoranda, if any, in support thereof should accompany or be embodied in the petition; and where facts are to be proven, the proof in the form of affidavits or declarations (and exhibits, if any) must accompany the petition.
- (c) When a petition is taken from an action or requirement of an examiner in the ex parte prosecution of an application, or in the ex parte or inter partes prosecution of a reexamination proceeding, it may be required that there have been a proper request for reconsideration (§ 1.111) and a repeated action by the examiner. The examiner may be directed by the Commissioner to furnish a written statement, within a specified time, setting forth the reasons for his or her decision upon the matters averred in the petition, supplying a copy to the petitioner.

#### **MPEP § 803 states:**

Under the statute an application may properly be required to be restricted to one of two or more claimed inventions only if they are able to support separate patents and they are

either independent (MPEP § 806.04 - § 806.04(i)) or distinct (MPEP § 806.05 - §806.05(i)).

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

## **CRITERIA FOR RESTRICTION BETWEEN PATENTABLY DISTINCT INVENTIONS**

There are two criteria for a proper requirement for restriction between patentably distinct inventions:

- (A) The inventions must be independent (see MPEP § 802.01, § 806.04, § 808.01) or distinct as claimed (see MPEP § 806.05 - § 806.05(i)); and
- (B) There must be a serious burden on the examiner if restriction is required (see MPEP § 803.02, § 806.04(a) - § 806.04(i), § 808.01(a), and § 808.02).... For purposes of the initial requirement, a serious burden on the examiner may be *prima facie* shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02....

### MPEP § 821.01 states:

Where the initial requirement is traversed, it should be reconsidered. If, upon reconsideration, the examiner is still of the opinion that restriction is proper, it should be repeated and made final in the next Office action. (See MPEP § 803.01.) In doing so, the examiner should reply to the reasons or arguments advanced by applicant in the traverse. Form paragraph 8.25 should be used to make a restriction requirement final.

## **DECISION**

Petitioner repeats argument that independent claims 1, 17, 23, and 30 of groups I, II, III, and IV of the invention are not properly classified based on the general definitions of the subclasses.

In response to Petitioner's argument, the examiner found each group of invention is distinct, and the search required for one group is not required for other groups. For group I, which is drawn to a programmable graphics pipeline, it is noted that 3D graphics pipeline can be performed through different stages. These stages are processed sequentially. This is also illustrated in Fig. 3 of the application, whereby the stages are implemented *using a vector processing engine 60 (described on page 13 of the specification), which comprises an instruction cache, a vector functional unit, and a register file as claimed in claim 1*. These distinct features are not found in either group II (claims 17-22), group III (claims 23-29), or group IV (claim 30), and requires intensive search in class 345, subclass 506.

For Group II (claims 17-22), which is drawn to “a method for producing one of graphics pixel data and media output data” by *obtaining configuration data and a location of an instruction and performing graphics processing or media processing* when particular claimed criteria are met. This corresponds to class 345, subclass 546, where multiple format types of data are stored and retrieved. These distinct features are not found in either group I (claims 1, 3-16), group III (claims 23-29), or group IV (claim 30).

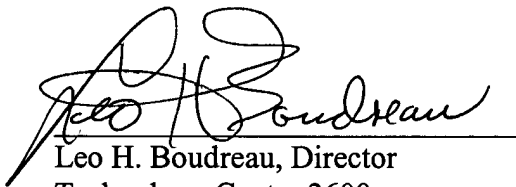
For group III (claims 23-29), which is drawn to processing “variable length data,” implemented by *using a vector streaming engine to access and write data to a memory, and a vector processing engine to generate pixel data*. Thus, the vector processing engine needs graphics instructions or commands to performing graphics operation, and this can only be found by intensive search in class 345, subclass 522. These distinct features are not found in either group I (claims 1, 3-16), group II (claims 17-22), or group IV (claim 30).

For group IV, apart from “processing variable length data”, group IV (claim 30) also requires “*caching graphics texture data*”, which requires intensive search in class 345, subclass 552, where texture memory is used to cache texture data. These distinct features are not found in either group I (claims 1, 3-16), group II (claims 17-22), or group III (claims 23-29).

Therefore, the examiner properly found that claims 1 and 3-30, respectively are drawn to different inventive concepts (subcombinations) which are patentably distinct for the reasons discussed above, and as shown by separate classification and fields of search.

For the above reasons, the petition is **DENIED** and the restriction requirement is deemed to be proper. Petitioner may submit a request for reconsideration within **TWO MONTHS** of the date of this decision.

It is noted that an After Final amendment was filed on December 15, 2004. An Advisory Action mailed June 9, 2005 indicates that the After Final Amendment would not be entered. Since no further response after Final action has been received, the application appears to be abandoned. Accordingly, the application is being forwarded to the examiner for mailing of a Notice of Abandonment.



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